

SAFETY DATA SHEET

Prepared on Commission Regulation (EU) no. 453/2010

1. Identification of the substance/mixture and of the company/undertaking			
Product/substance name	Grasidim 240 EC		Revision Date: 23/05/2022 Publish Date: 23/05/2022
Product/substance name Herbicide	CAS Number 99129-21-2	EINECS Number -	Index Number -
Supplier	Shandong Weifang Rainbow Chemical Co., Ltd. Binhai Economic Development Area, Weifang, Shandong, China Tel: +86-531-88875222,		
Sole distributor	Ecoguard Biosciences (Pty) Ltd. P.O. BOX 98634 SLOANE PARK 2152 EMERGENCY CONTACT Tel: (+27) 11 463 5842		
Regd. Office:	Rainbow Agrosiences Pty Ltd. Mazars house, Rialto Road, Grand Moorings Precinct, Century City, 7441 Tel: 031 903 8767		
Emergency telephone number	Transport accident:	086 100 0366	
	Treatment for poisoning cases:	082 446 8946	
		(+21) 931 6129	

2. Hazards identification			
Classification of the substance or mixture			
Acute Toxicity, Oral	Category 5	H303	
Acute Toxicity, Dermal	Category 5	H313	
Acute Toxicity, Inhalation	Category 4	H332	
Skin Corrosion/Irritation	Category 2	H315	
Serious Eye Damage/Irritation	Category 1	H318	
Skin Sensitization	Category 1	H317	
Germ cell mutagenicity	Category 1B	H340	
Carcinogenicity	Category 1B	H305	

Reproductive toxicity	Category 2	H361
Specific target organ toxicity – Single	Category 3	H336
Respiratory sensitization	Category 1	H334
Aquatic Toxicity - Acute	Category 2	H401
Aquatic Toxicity - Chronic	Category 2	H412

Label Elements

Hazard pictograms



Signal word

DANGER

Hazard statements

H303: May be harmful if swallowed
H313: May be harmful in contact with skin
H332: Harmful if inhaled
H315: Causes skin irritation
H318: Causes serious eye damage
H317: May cause an allergic skin reaction
H340: May cause genetic defects
H305: May cause cancer
H361: Suspected of damaging fertility or the unborn child
H336: May cause drowsiness or dizziness
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H401: Toxic to aquatic life
H412: Harmful to aquatic life with long lasting effects

Precautionary statements

P203: Obtain, read and follow all safety instructions before use
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash body thoroughly after handling
P264+P265: Wash hands thoroughly after handling. Do not touch eyes
P271: Use only outdoors or in a well-ventilated area
P272: Contaminated work clothing should not be allowed out of the workplace
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection
P284: [In case of inadequate ventilation] wear respiratory protection
P301+ P317: IF SWALLOWED: Get medical help
P302 + P317: IF ON SKIN: Get medical help

P302+P352: IF ON SKIN: Wash with plenty water
 P304 + P340: IF INHALED: remove person to fresh air and keep comfortable for breathing
 P305 + P354 + P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P317: Get medical help
 P318: IF exposed or concerned, get medical advice
 P319: Get medical help if you feel unwell
 P321: Specific treatment (see on this label)
 P332 + P317: If skin irritation occurs: Get medical help
 P333 + P317: If skin irritation or rash occurs: Get medical help
 P342 + P316: If experiencing respiratory symptoms: Get emergency medical help immediately
 P362 + P364: Take off contaminated clothing and wash it before reuse
 P403 + P233: Store in a well-ventilated place. Keep container tightly closed
 P405: Store locked up
 P501: Dispose of contents/container in accordance with local/regional/national/international regulations

Other Hazards

No information available

3. Composition/information on ingredients**Mixture**

Component	CAS No.	Concentration (%)	Classification
Clethodim	99129-21-2	24	Acute Toxicity, Oral, Category 4 Acute Toxicity, Dermal, Category 5 Acute Toxicity, Inhalation, Category 3 Skin Corrosion/Irritation, Category 2 Skin sensitization, Category 1 Aquatic Toxicity, Acute, Category 4 Aquatic Toxicity, Chronic, Category 3
Phenylethyl phenol polyoxyethylene ether	9004-82-4 & 68131-39-5	4.8	Acute Toxicity, Oral, Category 4 Acute Toxicity, Dermal, Category 5 Acute inhalation: Category 4 Skin Irritation, Category 2 Eye Irritation, Category 2 Skin sensitization, Category 1B Aquatic Toxicity, Acute, Category 1 Aquatic Toxicity, Chronic, Category 3
Calcium dodecylbenzene sulfonate	26264-06-2	4.8	Acute Toxicity, Oral, Category 4 Acute Toxicity, Dermal, Category 4 Acute Toxicity, Inhalation, Category 4 Skin Corrosion/Irritation, Category 2 Serious Eye Damage/Irritation, Category 1

			Aquatic Toxicity, Acute: Category 2 Aquatic Toxicity, Chronic, Category 4
Solvent naphtha	64742-95-6	66.4	Acute Dermal , Category 4 Skin Irritation, Category 2 Eye Irritation, Category 2 Germ cell mutagenicity: Category 1B Carcinogenicity: Category 1B Reproductive toxicity: Category 2 Specific target organ toxicity – Single: Category 3 Respiratory sensitization: Category 1 Aquatic Toxicity, Acute: Category 2 Aquatic Toxicity, Chronic, Category 3

4. First aid measures

First aid measures

Ingestion:

If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Inhalation:

Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily.

Skin contact:

Gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye contact:

No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Advice to doctors:

Treat symptomatically

Antidote:

Not available

Most important symptoms/effects, acute and delayed

This material contains light hydrocarbon liquid and an aspiration hazard may exist.

Indication of immediate medical attention and special treatment needed:

Not available

5. Firefighting measures

Suitable extinguishing media:

Carbon dioxide, dry chemical, foam or water fog

Special hazards arising from the chemical:

May emit toxic and irritating fumes under fire conditions. Normal combustion forms carbon dioxide, water vapour and may produce oxides of nitrogen. Combustion may produce toxic compounds of chlorine. Incomplete combustion can produce carbon monoxide.

Special protective actions for fire-fighters:

Ensure respiratory equipment is available. Evacuate immediate area. Wear full protective equipment, including breathing apparatus. Remove drums from site of fire, if possible, as overheating may cause some of the drums to explode. Surrounding containers should be cooled using a fine water spray. All run-off must be contained.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment to prevent skin and eyes being affected. Evacuate unprotected and unnecessary personnel from area of spill. If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourse.

Environmental precautions:

Keep away from sewers, surface and groundwater.

Methods and materials for containment and cleaning up:

Vermiculite, Sand, Soil is a suitable absorbent, especially soils high in clay. Soil can be used to form bunds to contain spillage. Contaminated soil should be collected for disposal at a suitable landfill. Contaminated area and tools should be washed down with hypochlorite bleach. Personal protective equipment and clothing should be washed with soapy water.

7. Handling and storage

Precautions for safe handling:

Keep away from food, drink, and animal feedstuff. KEEP OUT OF REACH OF CHILDREN. Wear suitable Personal protective equipment when handling and spraying.

Conditions for safe storage, including any incompatibilities:

Store in the original container in a dry, cool, ventilated, LOCKED area. DO NOT store in prolonged sunlight. DO NOT store with food, seed, or animal feedstuff.
Incompatible substances and mixtures: Refer to product label.

Packaging material: HDPE plastic containers.

8. Exposure controls/personal protection

Appropriate engineering controls:

No additional information available

Personal protective equipment:

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection: Protective gloves

Eye protection: Safety glasses

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls: Avoid release to the environment.

9. Physical and chemical properties

Appearance (physical state, color etc.):	Amber Liquid.
Odor:	Mild aromatic odour
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	No specific data. Liquid at normal temperatures.
Initial boiling point and boiling range:	Not available
Flash point:	>100
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Approx. 0.95 g/ml
Solubility(ies):	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

10. Stability and reactivity

Reactivity:

Normally stable.

Chemical stability:

Normally stable. Active may degrade in strong UV light.

Possibility of hazardous reactions:

No dangerous reactions known under normal conditions of use.

Conditions to avoid:

Very high or low temperatures.

Incompatible materials:

Strong oxidising agents.

Hazardous decomposition products:

Oxides of nitrogen and chlorine. Burning with limited oxygen may produce carbon monoxide.

11. Toxicological information

Acute health effects:

May be harmful in contact with skin.

May be harmful if swallowed.

Numerical measures of toxicity:

Acute oral LD50:	2118.5 mg/kg
Acute dermal LD50:	2590.5 mg/kg
Acute inhalation LC50:	2.92 mg/l
Skin irritation:	Category 2
Eye irritation:	Category 1
Skin sensitization:	Category 1
Germ cell mutagenicity:	Category 1B
Carcinogenicity:	Category 1B
Reproductive toxicity:	Category 2
Specific target organ toxicity (single exposure):	Category 3
Respiratory sensitization:	Category 1
Aspiration hazard:	Not available

12. Ecological information

Ecotoxicity:

Birds	LD50 mg/kg	>2000 mg/kg in bobwhite quail
	LD50 mg/kg	LC50 > 6000 ppm in mallard duck
Fish	LD50 mg/kg	LC50: 18 - 56 mg/L in rainbow trout
	LD50 mg/kg	33 mg/L in bluegill sunfish
Daphnia	LC50 mg/l	EC50 >120 mg/l
Algae	LC50 mg/l	EC50 > 12 mg/L
Bees	LD50 µg/bees	LD50 >100 µg/bee

Earthworms LC50 mg/kg 454 mg/kg

Persistence and degradability:

Clethodim is of low persistence in most soils with a reported half-life of approximately 3 days

Bioaccumulative potential:

Fish-BCF: 2.1

Mobility in the soil:

low

Other adverse effects:

Not available

13. Disposal considerations

Safe handling of waste residues and disposal methods:

Triple, or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. Transport information

Classification for ROAD and Rail transport:

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Clethodim)
Class	9
Packing group	III
Environmental hazards	Clethodim

Classification for SEA transport (IMO-IMDG):

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Clethodim)
Class	9
Packing group	III
Environmental hazards	Clethodim

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Clethodim)
Class	9

Packing group III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory information

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and /or local laws.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Contact:

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SLOANE PARK
2152

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
LC50:	Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

This Safety Data Sheet (SDS) complies with basic South African and EU regulatory requirements for SDS on the date of publication and is intended for translation and adaptation into European National documents. This document should NOT be relied upon for compliance with the laws and regulations of individual countries without the appropriate local translations and adaptations. It is your responsibility to ensure that any SDS taken or adapted from this system for re-distribution or use complies with all the laws and regulations which apply to any such use or re-distribution.